

Dykeman Dairy on a Mighty Cold Day - Fultonville, NY

1250 Cows

600 Replacements



Roy

John Brisbane

Josh Kilmartin

Dykeman Dairy - Baby Calves

- ✦ Housing - Hutches
- ✦ Milk Replacer, tea \angle x, summer & winter formulations
- ✦ Grain - 21% CP Pelleted Grower
- ✦ Weaning -
 - Start reducing milk replacer at 42 days
 - Off milk by 49 days
 - *Generally* moved by 56 days, 3.5 - 4.5 lbs. grain









Electronic Scale with Double Gate Cage for Weighing Calves



Dykeman Dairy - Transition Calves

- ✦ Housing - Groups of 14 to 18 move out of hutches as a group and stay together as a group (all in/all out). Group ends up in one of four areas of 2 old barns or moved through pen system in new transition barn. All cold housing, clean bedded pack, good air quality.
- ✦ 1 Lb. hay, 6 - 7 lbs. grower pellet, "taste" of haylage
- ✦ 2 mos. → 4 to 4.5 mos. depending on the amount of "push" in system







11-1
metabolism
3 Slabs Hay
0 Haylage
1 1/2 Pellet Grain
2 Blue Feed















Dykeman Dairy - "Young Growers" (underneath barn)

- ✦ Housing - Transition Groups of 14 to 18 move as unit into this area under another old barn. Usually 55 head but can go to 80 when a lot of push in system. Cold housing, clean bedded pack (last on ~ ~ ~ ~ e. , , ~ ~ ~ ~ air quality.
- ✦ Full TMR; mostly haylage, some corn silage, a touch of soybean meal.
- ✦ 4.5 mos. → 6 to 6.5 mos. de, endin, on the amount o push in the system.





Dykeman Dairy - "Middle Growers" (by bunks)

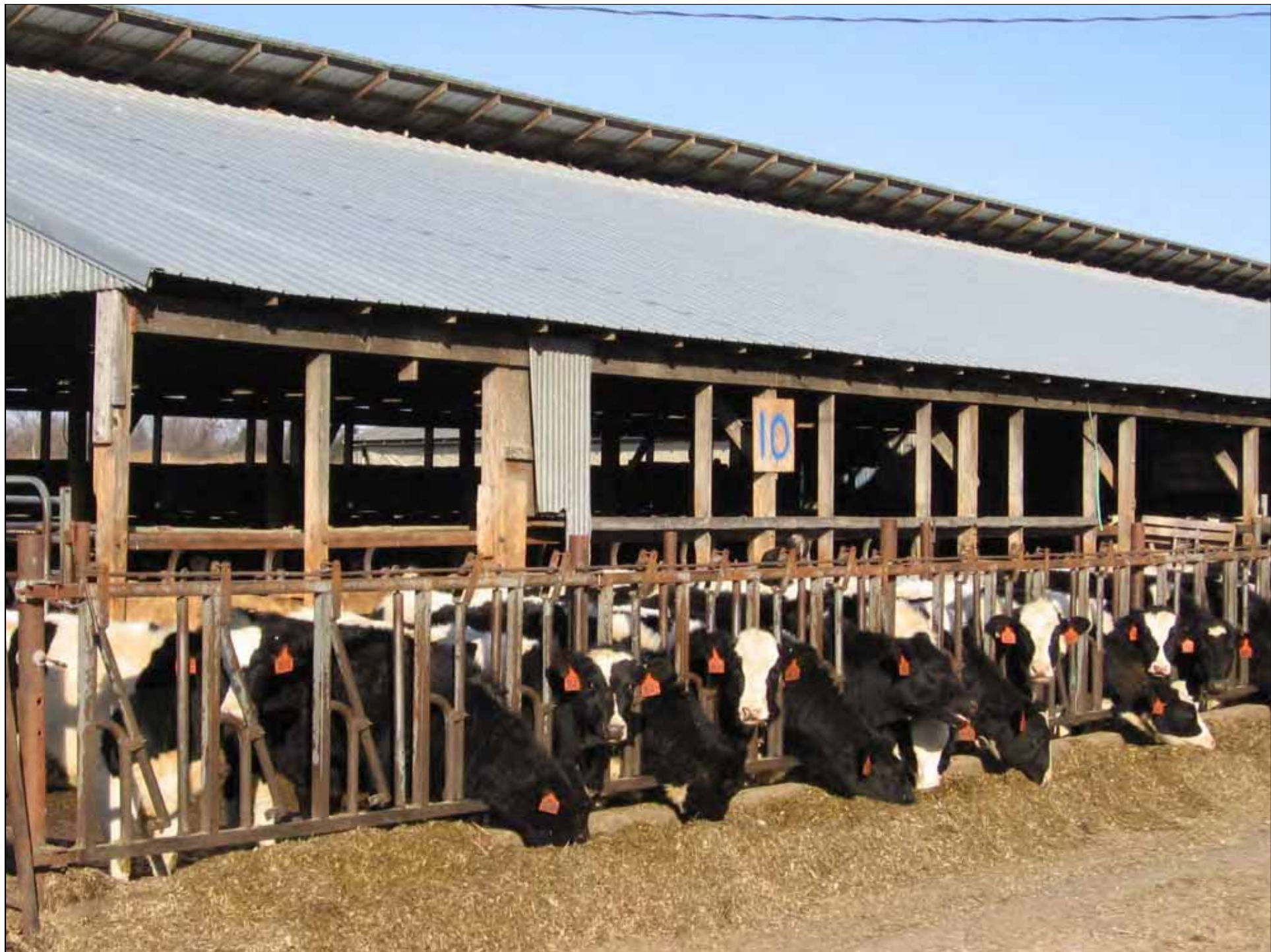
- ✦ Housing - First free stall housing. Three groups of 45 move through from west to east.
- ✦ Full TMR; mostly haylage, some corn silage
- ✦ 7 mos., 8 mos. and 9.5 - 10 mos. average age in the three groups respectively.





Dykeman Dairy - "Big Growers" (next barn to east)

- ✦ Housing - Free stalls
- ✦ Full TMR; mostly haylage, some corn silage
- ✦ 10.5 mos. → Breeding age/size 700 - 800 lbs.
depending on expected mature size)

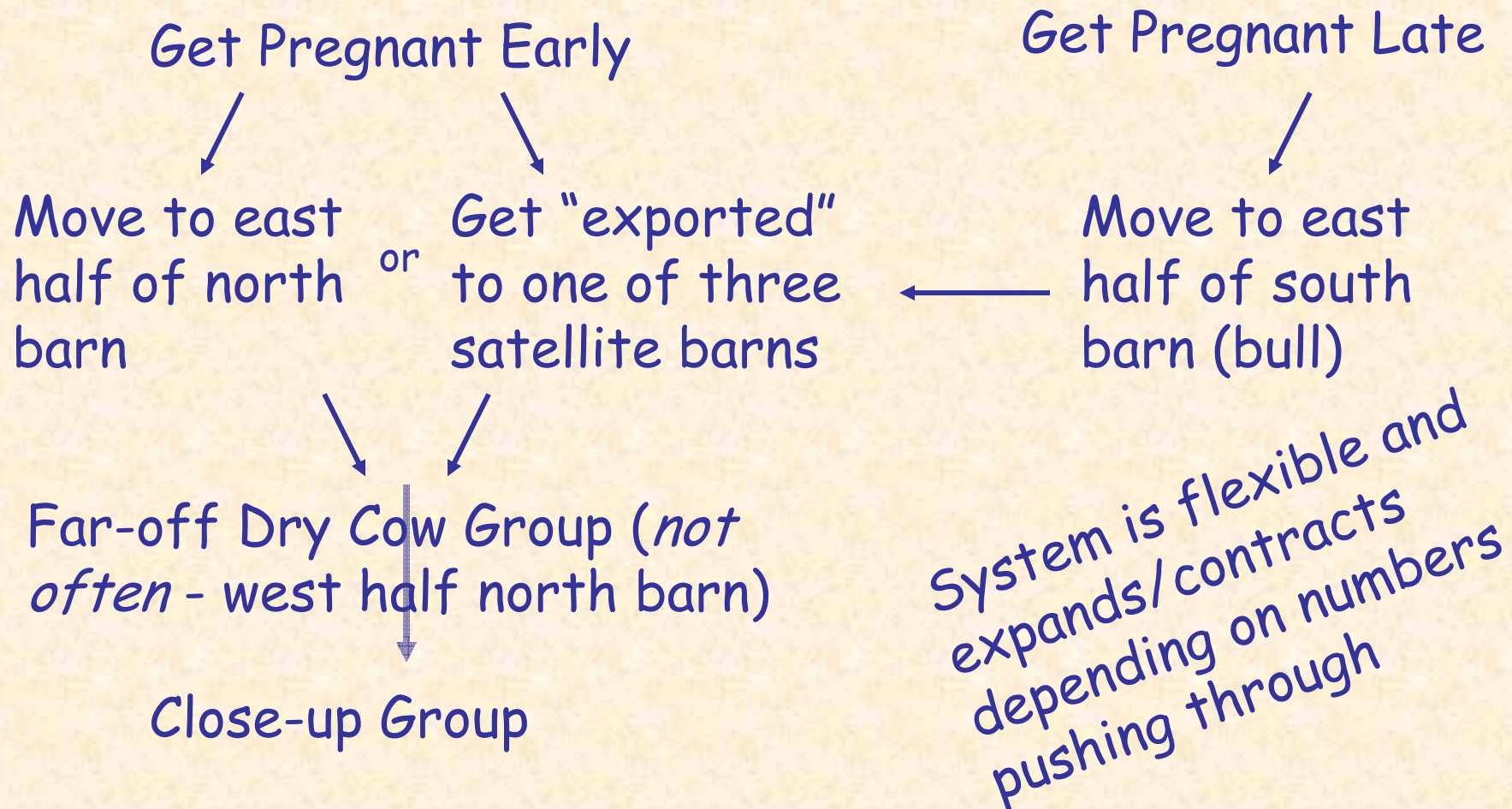






Dykeman Dairy - Breeding → Freshening

- ✦ Housing - Free stalls
- ✦ Full TMR; mostly haylage, some corn silage, late breeders have straw added







North Barn
East Half

South Barn – East Half

North Barn
West Half

South Barn – West Half







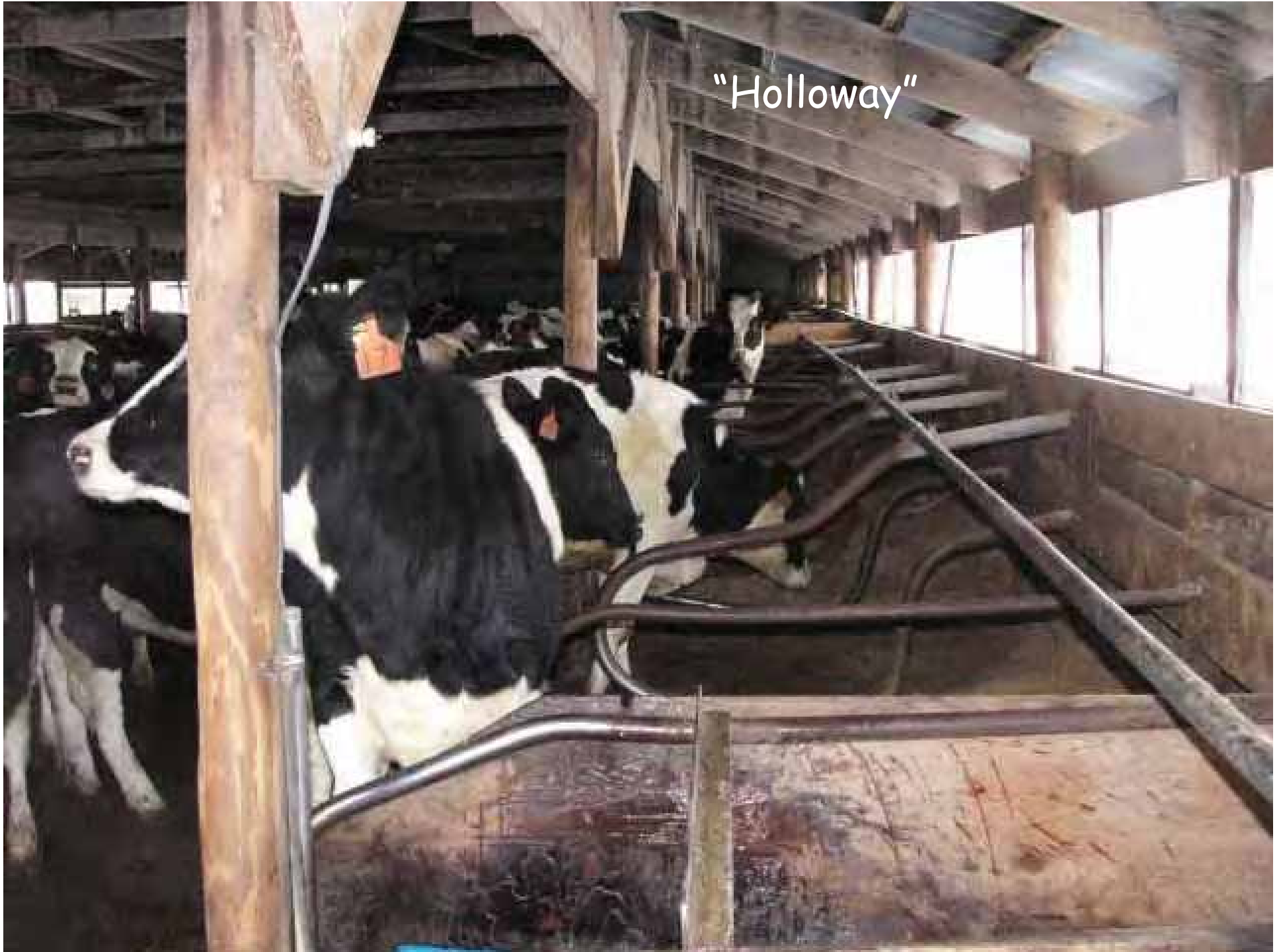
"Holloway"



"Holloway"



"Holloway"







Case Farm Costs



Dykeman

Breakdown of Costs of Raising Heifers by Stage of Growth Dykeman				
Per Pound of Gain	Stage of Growth			
	Birth to 200 Lbs	201 to 700 Lbs	701 to 850 Lbs	851 to Calving
Feed	\$0.791	\$0.521	\$0.648	\$0.807
Labor	\$1.429	\$0.114	\$0.075	\$0.164
All Other Costs	\$0.777	\$0.367	\$0.567	\$0.897
Total	\$2.997	\$1.002	\$1.290	\$1.867
By Total Investment	Stage of Growth			
	Birth to 200 Lbs	201 to 700 Lbs	701 to 850 Lbs	851 to Calving
Feed	\$87.1	\$260.7	\$97.2	\$363.1
Labor	17.1	\$56.	11.	7 .
All Other Costs	\$85.5	\$183.6	\$85.1	\$403.5
Total	\$329.7	\$501.2	\$193.5	\$840.3
% of Total Costs	17.7%	26.9%	10.4%	45.1%
% of Total Growth	8%	38%	12%	35%

Dykeman



Age Leaving Replacement Program	23.0	Months
Weight Leaving Replacement Program	1232	Lbs.
Average Daily Rate of Gain	1.64	Lbs.
All Heifers per Labor Hour, On Farm Only	35.35	
Pre-Weaned Heifers per Labor Hour	4.71	
Post Weaned Heifers per Labor Hour	71.1	
Cost Investment in Animal	\$1,847.05	
% Dairy Replacement Cull Rate	1.84%	
% Non-Completion Rate, Based on Animals Entering System	3.47%	

Dykeman



	Average Cost		Per Animal Completing Program		Percent
	Per day per Animal	Per Pound of Gain	99.5	wks	
Feed	\$1.058	\$0.645	\$736.46		43.4%
Labor	\$0.405	\$0.247	\$281.86		16.6%
Bedding	\$0.117	\$0.071	\$81.18		4.8%
Health	\$0.085	\$0.052	\$58.92		3.5%
Breeding	\$0.068	\$0.041	\$47.31		2.8%
Trucking	\$0.007	\$0.004	\$4.69		0.3%
Insurance	\$0.005	\$0.003	\$3.81		0.2%
Machinery Operation	\$0.054	\$0.033	\$37.91		2.2%
Machinery Ownership	\$0.034	\$0.021	\$23.99		1.4%
Building Operation	\$0.018	\$0.011	\$12.18		0.7%
Building Ownership	\$0.110	\$0.067	\$76.56		4.3%
Manure Storage Operation	\$0.000	\$0.000	\$0.00		0.0%
Manure Storage Ownership	\$0.018	\$0.011	\$12.87		0.8%
Manure Spreading	\$0.100	\$0.061	\$69.54		4.1%
Custom Boarding	\$0.116	\$0.071	\$80.92		4.8%
Professional Services & Fees	\$0.000	\$0.000	\$0.00		0.0%
Non-Performance Expense	\$0.044	\$0.027	\$30.39		1.8%
Interest on Daily Investment	\$0.199	\$0.121	\$138.46		8.2%
Total	\$2.438	\$1.486	\$1,697.05		100.0%

Health Program

Dykeman

PRO-DAIRY

	Per Animal per Day	Per Pound of Gain	Per Animal
Group 1			
Preventative	\$0.75	\$0.51	\$35.96
Treatment	\$0.12	\$0.09	\$5.95
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.87	\$0.60	\$41.91

Group 2			
Preventative	\$0.01	\$0.01	\$1.24
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.01	\$0.01	\$1.24

Group 3			
Preventative	\$0.06	\$0.03	\$3.30
Treatment	\$0.01	\$0.01	\$0.66
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.08	\$0.04	\$3.96

Group 4			
Preventative	\$0.01	\$0.01	\$1.25
Treatment	\$0.01	\$0.01	\$1.49
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.02	\$0.01	\$2.74

Group 5			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.01	\$0.01	\$0.99
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.01	\$0.01	\$0.99

Group 6			
Preventative	\$0.04	\$0.03	\$3.33
Treatment	\$0.01	\$0.01	\$0.99
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.06	\$0.04	\$4.32

Summary All Groups	Per Animal per Day	Per Pound of Gain	Per Animal
Preventative	\$0.07	\$0.04	\$48.84
Treatment	\$0.01	\$0.01	\$10.08
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.08	\$0.05	\$58.92

	Per Animal per Day	Per Pound of Gain	Per Animal
Group 7			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

Group 8			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

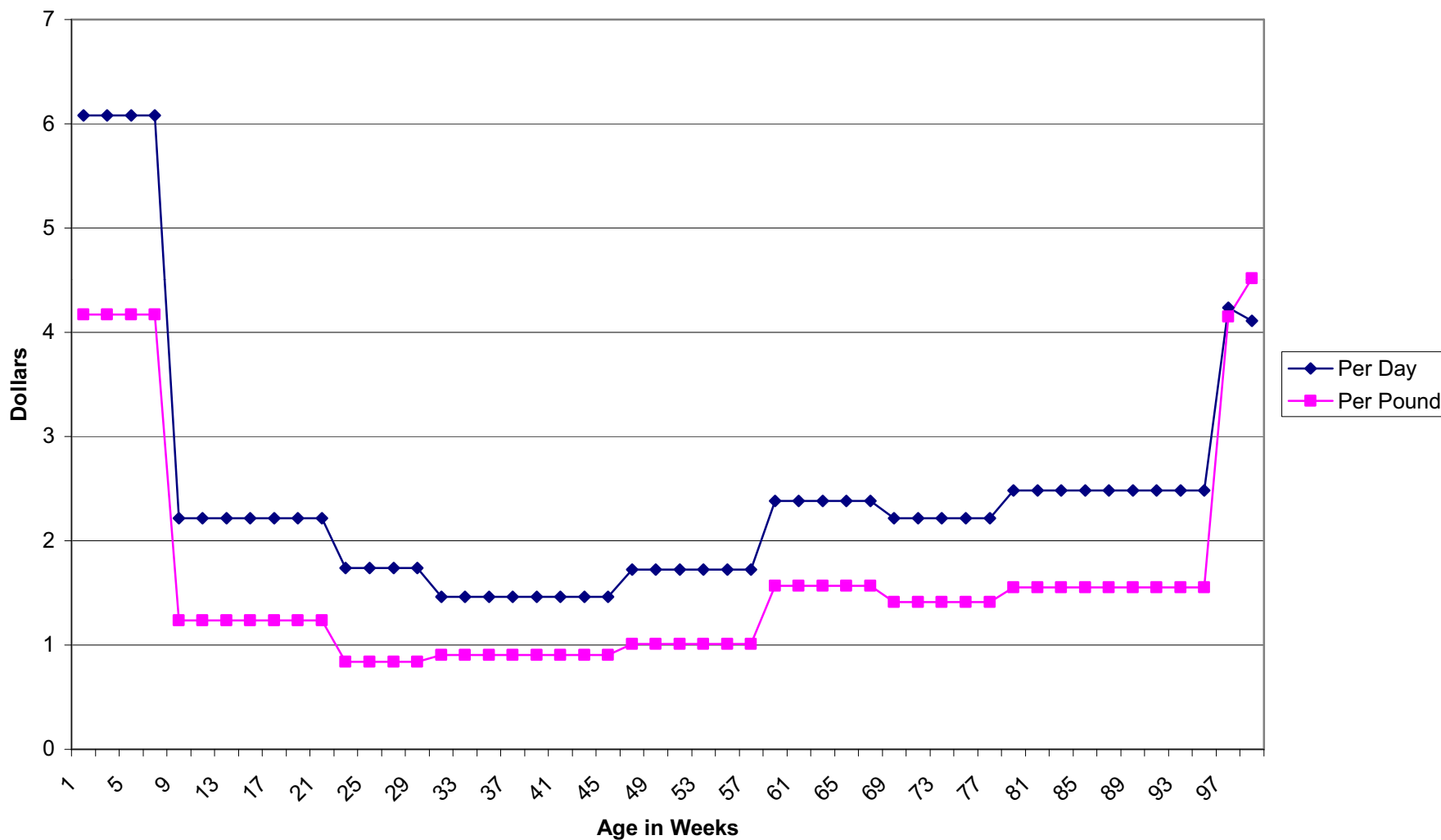
Group 9			
Preventative	\$0.15	\$0.15	\$3.76
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.15	\$0.15	\$3.76

Group 10			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

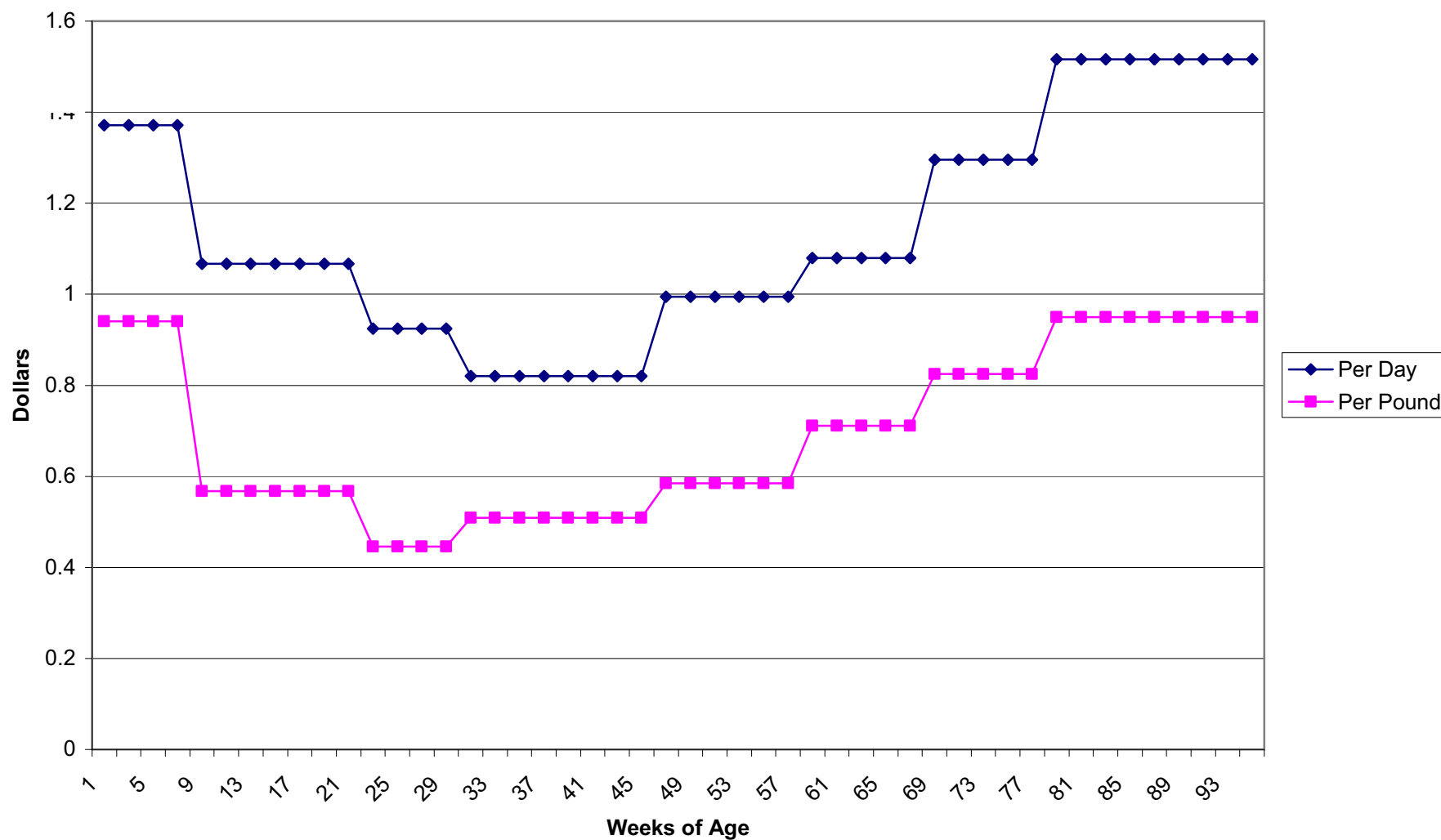
Group 11			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

Group 12			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

Dykeman Farms Total Heifer Raising Costs



Dykeman Farms Heifer Feed Costs



Passive Immunity Achievement

- ♦ Blood IgG >10mg/ml ✓
or Blood serum protein
>5.0g/dl

(at 48 hours of life)

≥85% achieving

(95% is achievable)

(86%* Dykeman)

**2 calves receiving colostrum
replacement did not achieve*

Optimize Pre- Weaning Gains

- ♦ Double birth weight
In 56 days

≥90% achieving

1.85x (avg.)

14%*

(Dykeman)

*Currently battling
E Coli strain

Dykeman Case Farm

Biological Growth Targets

• 55% mature weight @ breeding

• 82 - 85% mature weight
@ 1st calving

≥ 90% achieving

*Breeding: Avg. 56% *ivivv*
(69% Achieving)

*Calving: Avg. 78% MW
(14% Achieving)
(Dykeman)

What Makes a "Quality Heifer" -- (Dykeman) Maintaining Management Momentum

• 1st Calf "Treated" as Calf/Heifer* ≤ 30% ?
24 hrs. → 3 mos. _____ 4 mos. → fresh _____

• DOAs in first calf heifers ≤ 9% 19%
Male DOAs 19% Female DOAs 19%

• 1st Calf avg. peak ≥ 80% of Mature 71%
or total lactation ≥ 80% of Mature 80%

• 1st Calf Culls ≤ 60 Days in Milk ≤ 5% 5%

• 1st Calf ME's ≥ Mature < (-595)

• 1st Calf "Treated" in Lactation* ≤ 15% ?

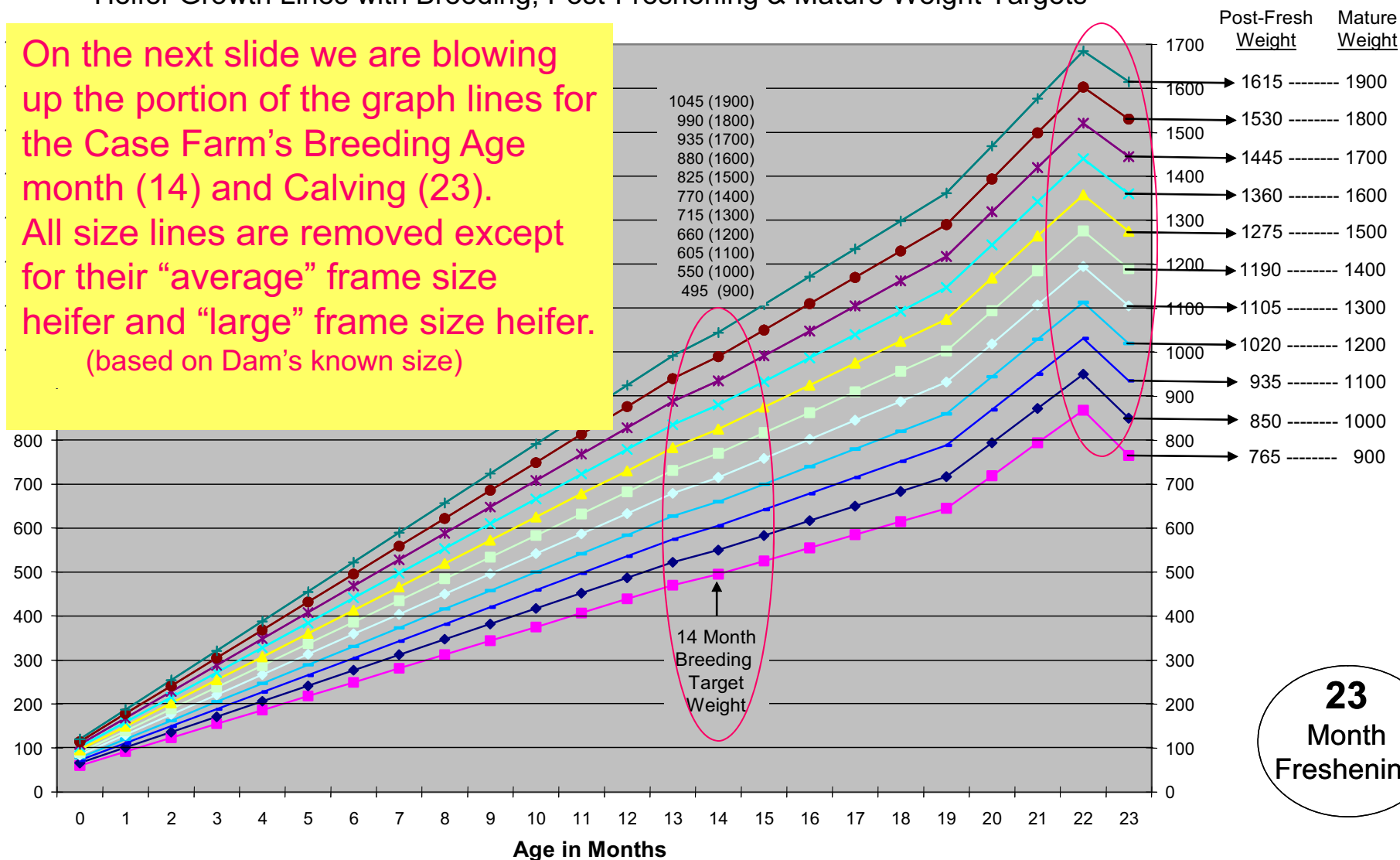
• ≥ 85% retention (any herd) to 2nd lactation 90%

• Reduce #1 reason for 1st lactation culls
(continuous improvement) **Repro**

Heifer Growth Lines with Breeding, Post-Freshening & Mature Weight Targets

On the next slide we are blowing up the portion of the graph lines for the Case Farm's Breeding Age month (14) and Calving (23). All size lines are removed except for their "average" frame size heifer and "large" frame size heifer. (based on Dam's known size)

Lbs. Bodyweight



To get PowerPoint File for printing additional graph pages go to: <http://www.ansci.cornell.edu/prodairy/heiftarget>

